Introduction to Bonneville Power Administration

Greg Delwiche,
Senior Vice President, BPA Power Services

January 31, 2013

Federal Columbia River Power System

Columbia River Basin & BPA Service Area

WHAT IS BPA?

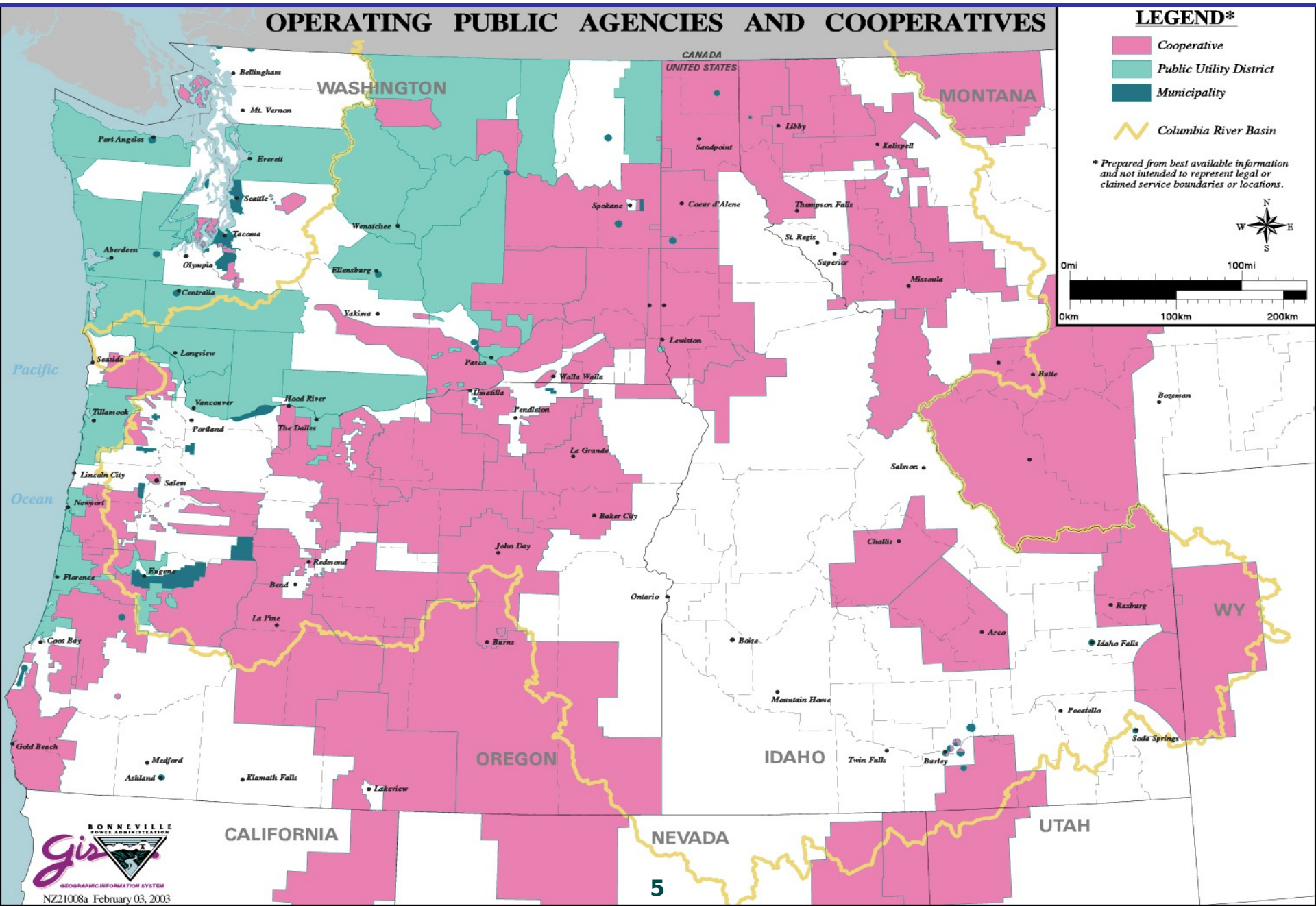
- **Self-funding federal agency within DOE. Sets rates to recover costs.**
- **Markets power at cost from 31 federal dams and 1 nuclear plant – over one-third of electricity used in PNW**
- **Markets transmission services – owns 75% (15,000 miles) of the high-voltage lines in PNW**
- **Protects, mitigates & enhances fish & wildlife in the Columbia River Basin**
- **300,000-square mile service area – includes WA, OR, ID and Western MT**
- **$3 billion in annual revenues**
- **3,000 employees**

The BPA Mission

- **The Bonneville Power Administration's mission as a public service organization is to create and deliver the best value for our customers and constituents as we act in concert with others to assure the Pacific Northwest:**
  - An adequate, efficient, economical and reliable power supply
  - A transmission system that is adequate to the task of integrating and transmitting power from federal and non-federal generating units, providing service to BPA's customers, providing interregional interconnections, and maintaining electrical reliability and stability; and
  - Mitigation of the Federal Columbia River Power System's impacts on fish and wildlife.
- **BPA is committed to cost-based rates, and public and regional preference in its marketing of power. BPA will set its rates as low as possible consistent with sound business principles and the full recovery of all of its costs, including timely repayment of the federal investment in the system.**

Who We Serve

- **Publicly Owned Utilities**:
  - BPA's principal customer base consists of 146 Northwest public utility districts, municipalities and electric cooperatives. These entities are called "preference customers" because they have a statutory preference and priority in the purchase of available federal power at BPA's priority-firm rate for most of their loads.
- **Investor-owned Utilities:**
  - Consists of six regional IOUs.
  - On July 26, 2011, BPA adopted a landmark settlement of the Residential Exchange Program, with the hope it will end years of dispute over the way consumers share the benefits of low-cost hydroelectric power from the Columbia River system. This settles BPA's statutory obligation to provide benefits under the Residential Exchange Program through 2017.


OPERATING PUBLIC AGENCIES AND COOPERATIVES
LEGEND*
Cooperative
Public Utility District
Municipality
Columbia River Basin
* Prepared from best available information and not intended to represent legal or claimed service boundaries or locations.
0mi
100mi
0km
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200km
CANADA
UNITED STATES
WASHINGTON
MONTANA
OREGON
IDAHO
WY
CALIFORNIA
NEVADA
UTAH
Pacific
Ocean
Bellingham
Mt. Vernon
Port Angeles
Everett
Seattle
Tacoma
Aberdeen
Olympia
Centralia
Wenatchee
Ellensburg
Yakima
Longview
Seaside
Vancouver
Hood River
Tillamook
Portland
The Dalles
Lincoln City
Salem
Newport
Florence
Eugene
Coos Bay
Gold Beach
Medford
Ashland
Klamath Falls
Lakeview
Redmond
Bend
La Pine
Burns
John Day
Baker City
La Grande
Pendleton
Umatilla
Pasco
Walla Walla
Lewiston
Spokane
Coeur d'Alene
Sandpoint
Libby
Kalispell
Thompson Falls
St. Regis
Superior
Missoula
Butte
Bozeman
Salmon
Challis
Arco
Idaho Falls
Rexburg
Ontario
Boise
Mountain Home
Twin Falls
Burley
Pocatello
Soda Springs
BONNEVILLE POWER ADMINISTRATION
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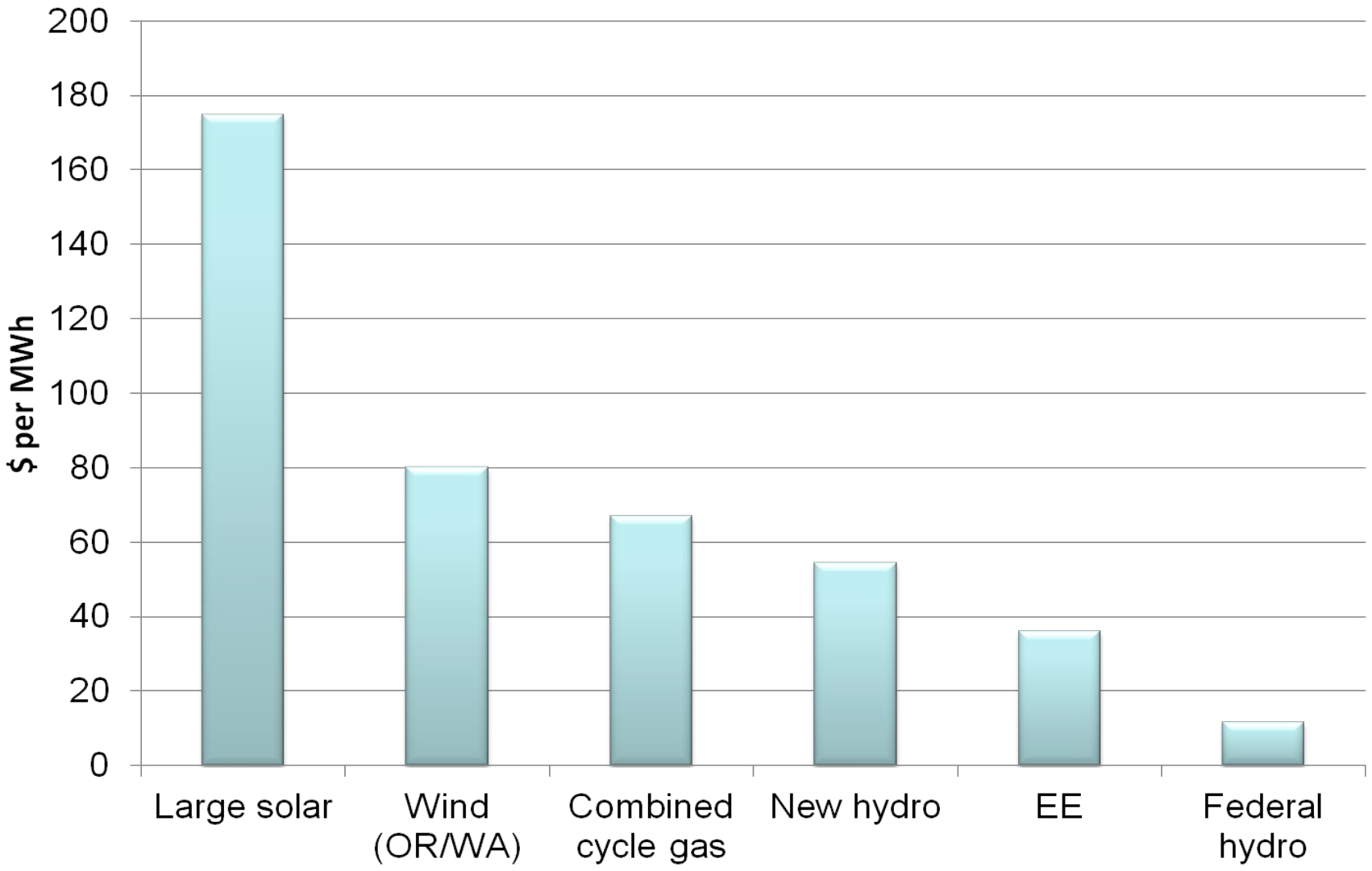
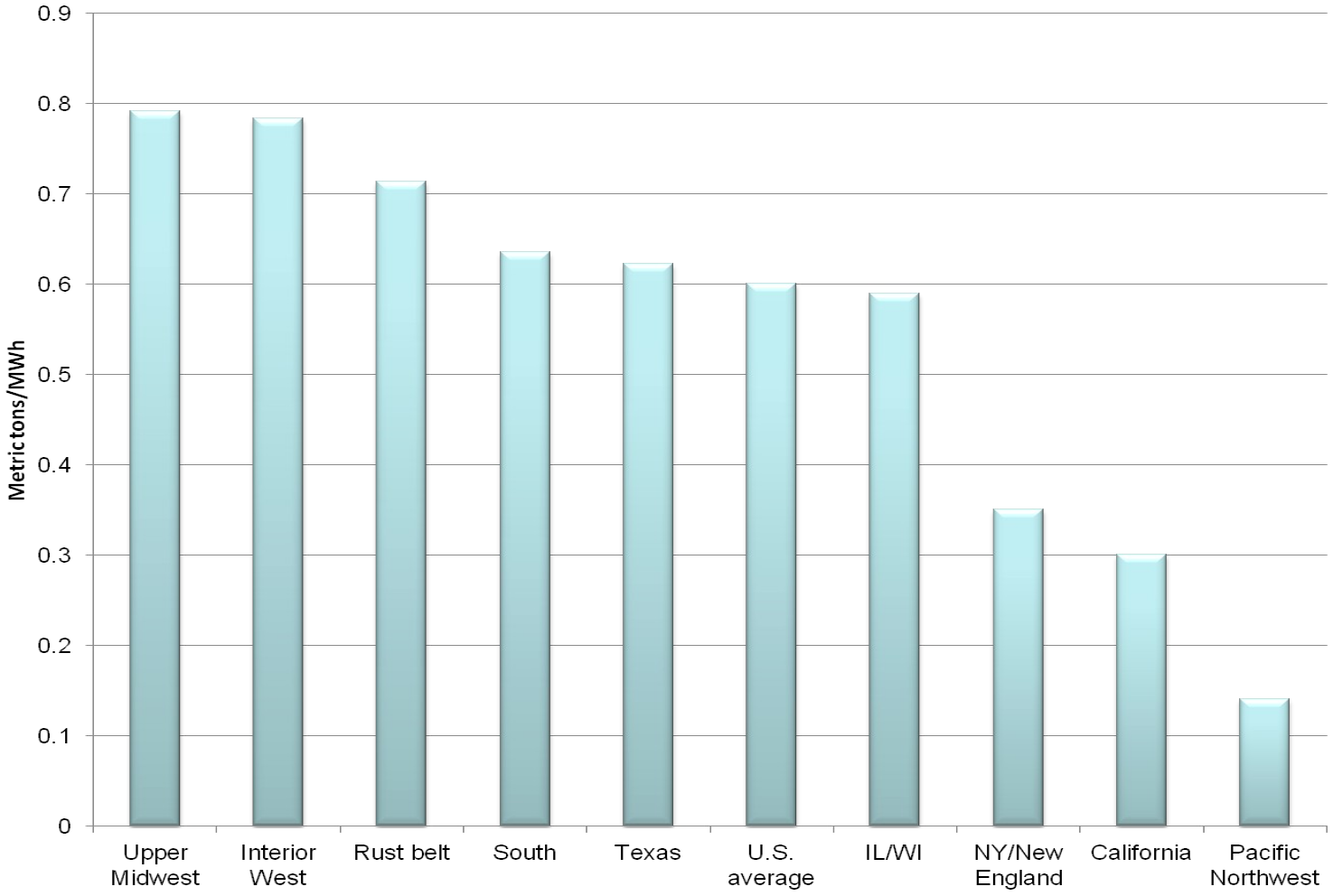
NZ21008a February 03, 2003

Cost of electric generation



CO_2 emissions from generation



Major Power Functions

- **Generation Asset Management:**
  - **Coordinates in partnership with Corps of Engineers and Bureau of Reclamation, for hydro O&M and capital investments at FCRPS hydropower dams under direct-funding agreements; also responsible for operations planning and power scheduling for FCRPS.**
- **Requirements Marketing:**
  - **Creates and maintains the business interface with BPA's public customers. Responsible for implementation of long-term power sales contracts with BPA's public customers.**
- **Bulk Marketing:**
  - **Responsible for all marketing, sales and account servicing in the bulk power markets, including managing of supply/demand through trading floor sales and purchases for up to 2 years in the future.**
- **Policy & Rates:**
  - **Responsible for ensuring that strategy and policy in Power Services are driven by integrated analysis of the financial, rate and risk effects of decision alternatives; has lead responsibility for Power rate case.**
- **Energy Efficiency:**
  - **Energy Efficiency fosters and promotes the efficient use of energy by working with allies and partners and administers BPA's conservation acquisition contracts, provides technical and administrative support for BPA's market transformation activities, and produces and delivers energy efficiency programs, products, and services.**

Other Major Functions

- **Transmission Services:**
  - **BPA Transmission Services manages the federally owned transmission lines and facilities in the Pacific Northwest.**
  - **Transmission Services conducts the sale of transmission services according the rules of its Open Access Transmission Tariff, orders of the Federal Energy Regulatory Commission (FERC), regulatory requirements of reliability organizations such as NERC and WECC, and in accordance with standard industry practices.**
  - **BPA continues to support Northwest wind and other renewable power development. BPA is committed to the development of a long-term balancing reserve strategy that increases the ability of market participants to acquire balancing capacity to meet the needs of their Variable Energy Resources and assures reliable operation of the BPA transmission system.**
    - **The Enhanced BPA Balancing Authority (EBBA) concept has been developed to begin the discussion with customers on the development of this BPA long-term balancing reserve strategy.**

- **Environment, Fish & Wildlife**
  - **Because BPA sells and distributes the power from the 31 federal dams on the Columbia and Snake rivers, we are committed to our obligations to mitigate for the impacts of these dams on fish, wildlife and habitat. BPA is proud to fund and manage one of the largest fish and wildlife protection programs in the nation (hundreds of millions each year in hard costs and "lost opportunity" costs due to sub-optimal hydro system operations).**
  - **BPA's fish and wildlife program is paid for through the electric rates of utilities that buy power from BPA. It is not funded by U.S. taxpayers. Without these fish and wildlife costs, BPA's electricity rate to its Northwest public utility customers would be about a third lower.**

An Energy Efficiency Success Story

As of 2009, the cumulative energy efficiency acquired in the United States was equivalent to 1 percent of all energy production in our country. But in the Pacific Northwest, the cumulative energy efficiency accounted for 12 percent of all energy production in our part of the country, thanks to collaboration among a number of entities - the Bonneville Power Administration, Northwest Power and Conservation Council, regional utilities, state agencies and environmental interests.

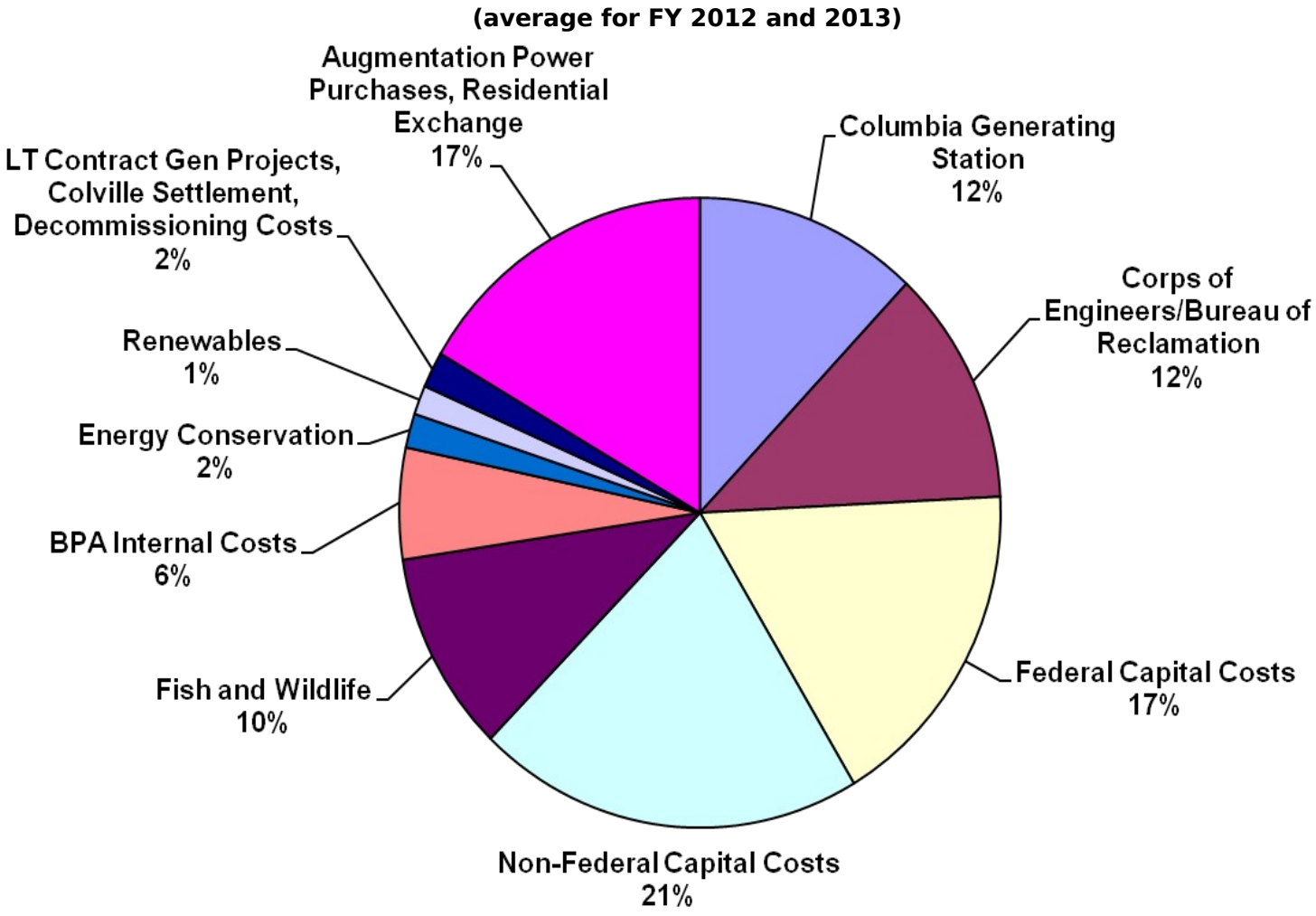
In 2011, we acquired more than 117 average megawatts of energy savings. This is the largest amount acquired in a single year by public power since the Northwest Power Act passed.

Tiered Rate Methodology

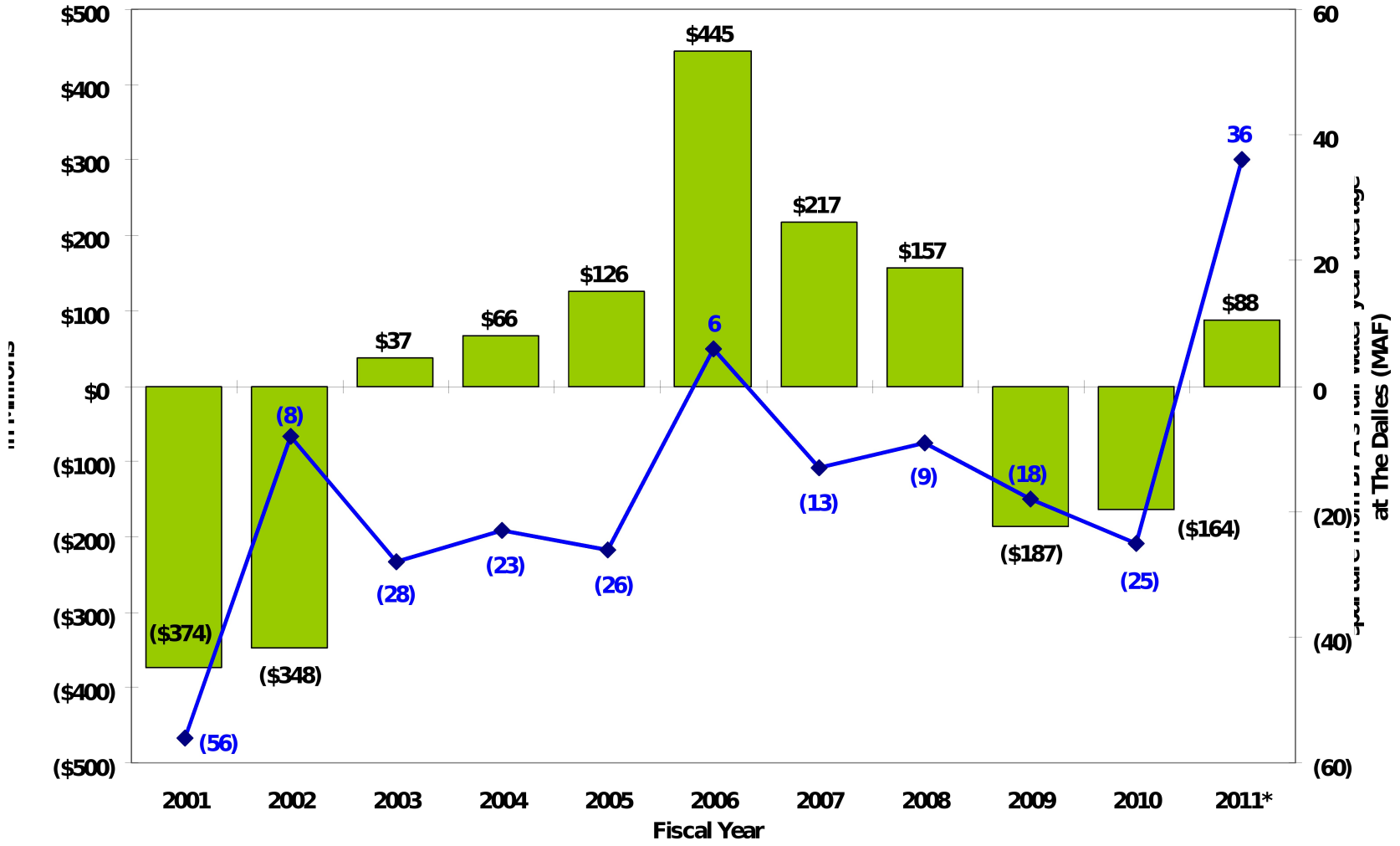
- **In 2008, BPA established a two-tiered firm power rate design for its public power customers who signed long-term power contracts with the agency (expiring in 2028).**
  - BPA and utilities worked to establish a base Tier 1 Rate structure that represent the agency's available lowest-cost resources.
  - The Tier 2 Rates represent incrementally higher cost power BPA must purchase to serve any portion of a BPA customer's annual power needs beyond what is covered by Tier 1 Rates.
  - Encourages utilities to use energy efficiency and conservation measures and gives clear price signals in case utilities want to secure their own resources (example: A utility might use all the Tier 1 Rate they are allowed and then would build resources and/or make purchases to cover the remaining needs – instead of using BPA's Tier 2 Rate.
- **Provides for rates to be set every two years.**

Cost Breakdown Power Rates

Approximate Percentage Of Total Revenue Requirement

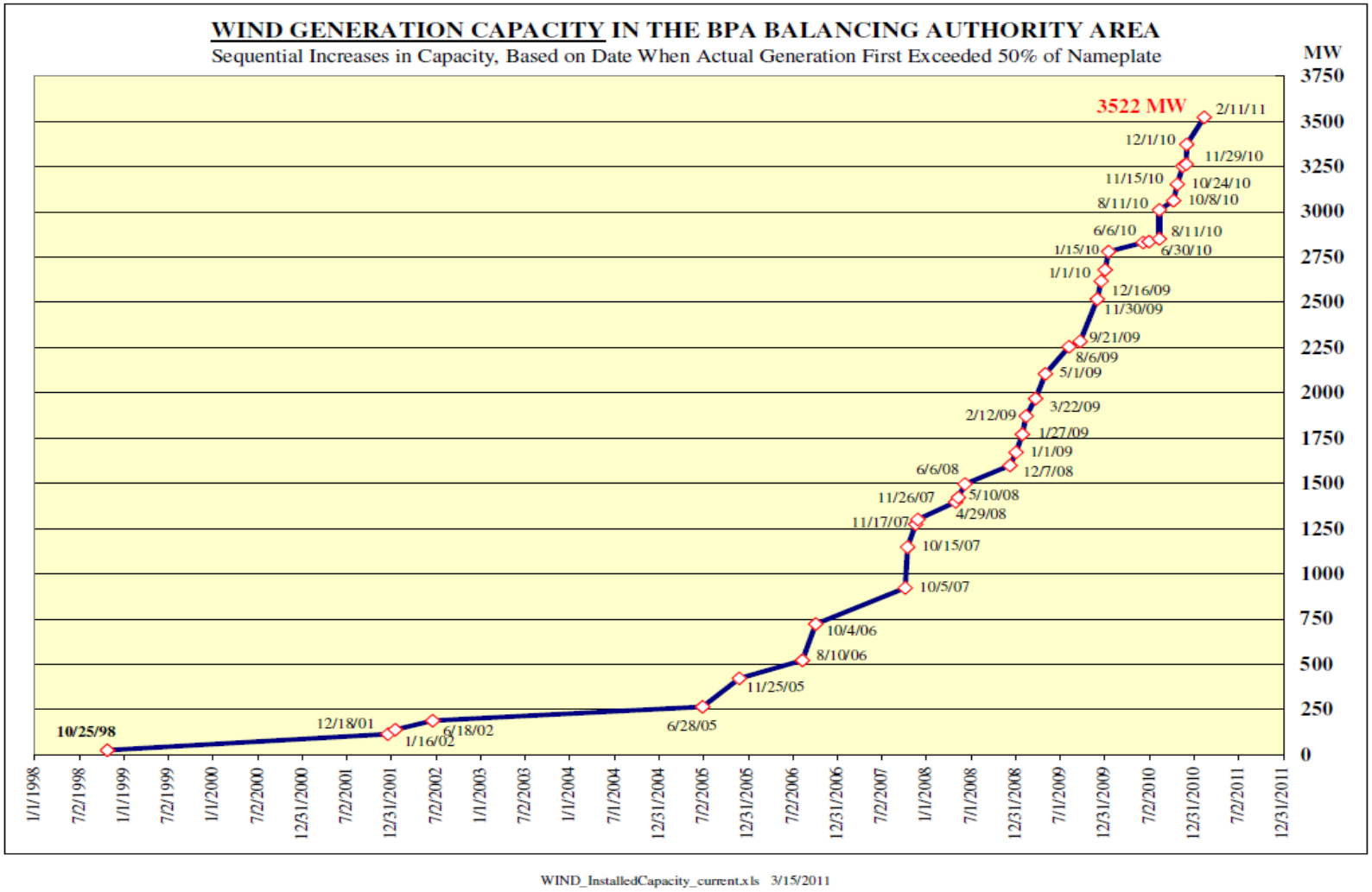

(average for FY 2012 and 2013)
Augmentation Power Purchases, Residential Exchange 17%
Columbia Generating Station 12%
LT Contract Gen Projects, Colville Settlement, Decommissioning Costs 2%
Corps of Engineers/Bureau of Reclamation 12%
Renewables 1%
Energy Conservation 2%
BPA Internal Costs 6%
Fish and Wildlife 10%
Federal Capital Costs 17%
Non-Federal Capital Costs 21%

Annual Agency Modified Net Revenues

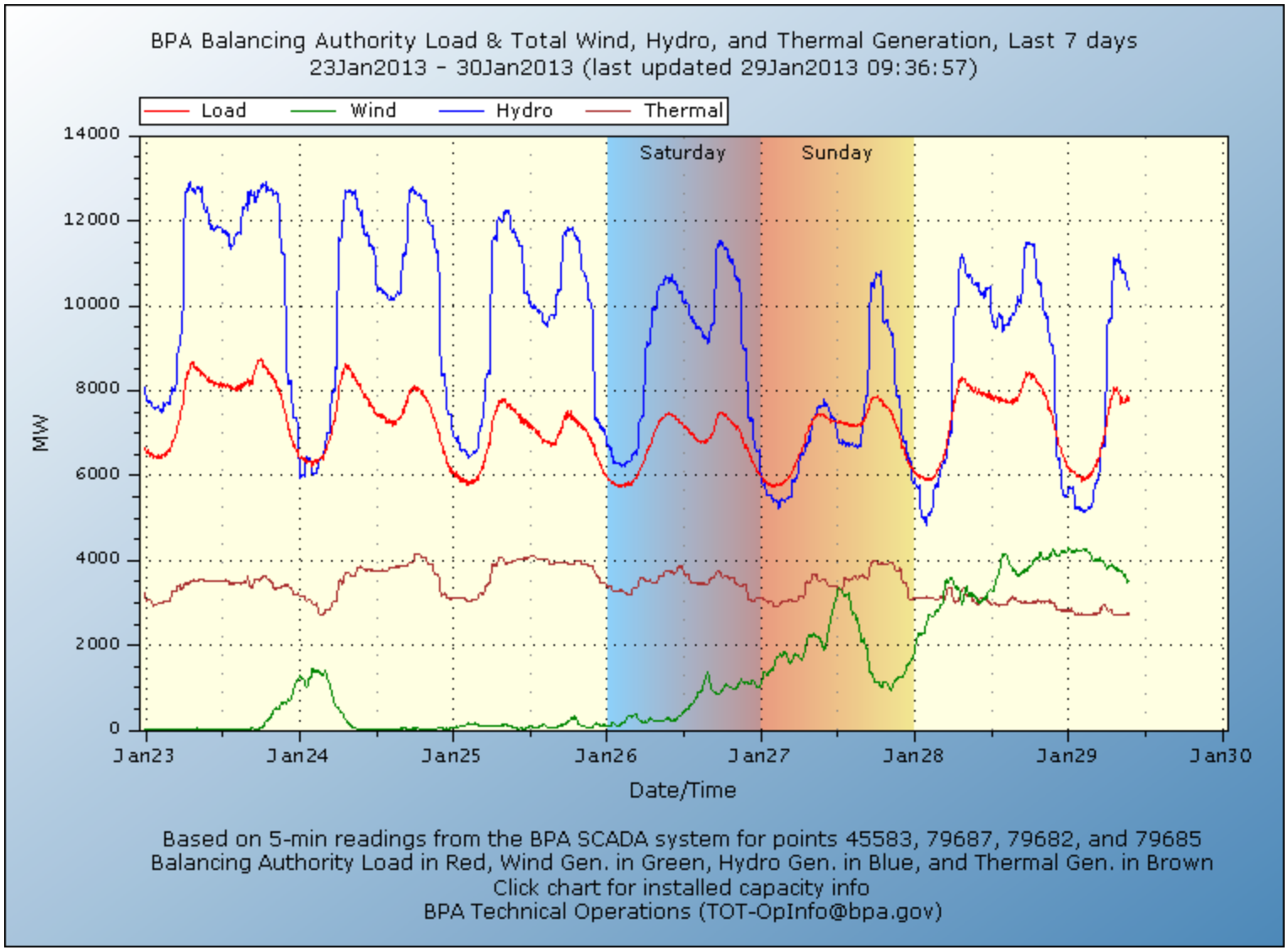


** 2011 results are from the O3 forecast of Net Revenue and the observed Jan-July runoff at The Dalles compared to the Jan-July average at The Dalles.*

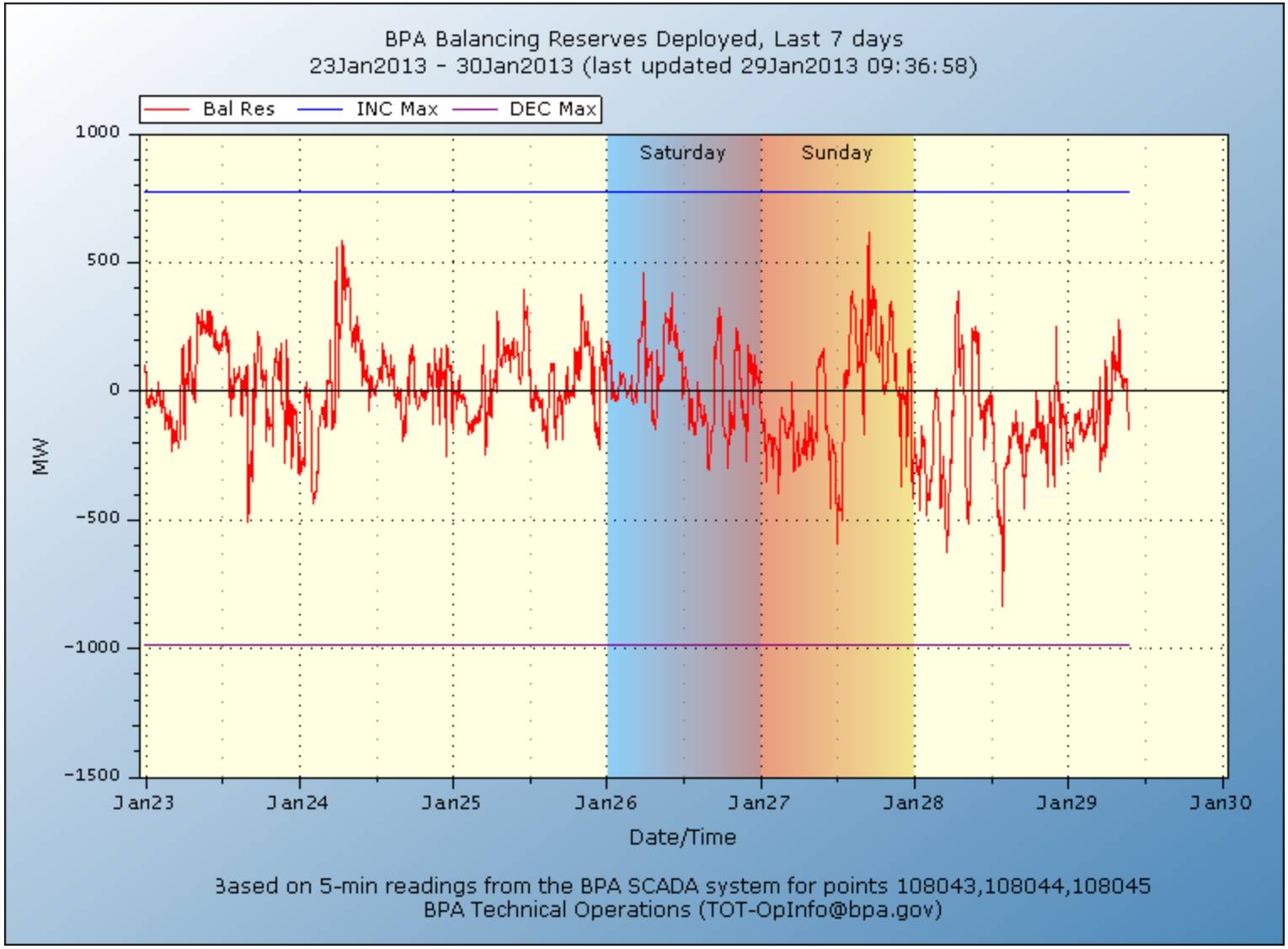
Wind Generation Capacity in the BPA Balancing Authority Area



BPA Balancing Authority Area: All Resources + Load



BPA Balancing Authority Area: Balancing Reserves Deployed



Questions?

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[Please direct follow-up questions after January 31, 2013 to Scott Simms at srsimms@bpa.gov]